

## **ABSTRACT**

### **PORTABLE, CRYOGENIC GAS DELIVERY APPARATUS**

A portable, cryogenic gas delivery apparatus includes a chamber which contains cryogenic material, such as oxygen, in both liquid and gas phases. A probe is mounted to  
5 move relative to the chamber in response to variations in pressure in the gas phase within the chamber. The probe has one part positioned within the chamber so that it is exposed to the pressure and temperature of the gas within the chamber and a second part located outside the chamber. The probe thus introduces heat from the ambient into the chamber. The probe preferably moves relative to the chamber in response to variations in pressure,  
10 moving away from the chamber to reduce the amount of thermal energy introduced into the chamber and toward the chamber to increase the amount of thermal energy introduced into the chamber. The apparatus includes a conserver which receives gas evaporating from the chamber and delivers it in efficient pulses to the end user in response to the user's inhalation.